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BEFORE THE
POSTAL REGULATORY COMMISSION
WASHINGTON, D.C. 20268–0001

PERIODIC REPORTING (PROPOSAL TEN)	Docket No. RM2020-2

PETITION OF THE UNITED STATES POSTAL SERVICE FOR THE INITIATION OF A PROCEEDING TO CONSIDER PROPOSED CHANGES IN ANALYTICAL PRINCIPLES (PROPOSAL TEN)

(November 29, 2019)

Pursuant to 39 C.F.R. § 3050.11, the Postal Service requests that the Commission initiate a rulemaking proceeding to consider a proposal to change analytical principles relating to the Postal Service's periodic reports. The proposal, intended to update the econometric variabilities used for the allocation of Postmaster costs to products, is labeled Proposal Ten and is discussed in detail in the attached text.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

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Proposal Ten: Update and Improve the Postmaster Variabilities

Objective:

The objective of this proposal is to update and improve the variabilities for calculating attributable Postmaster costs. This is accomplished through a new study of Postmaster costs that relies upon operational Postmaster data and reflects the current structure of Postmaster activities and compensation. Because the extensive underlying data collection, analysis, and synthesis supporting this proposal ran relatively late into the year, the Postal Service acknowledges that review is unlikely to be complete for purposes of FY 2019 ACR preparation. The Postal Service nonetheless hopes to be able to incorporate the proposal, if approved, into the ACR for FY 2020.

Background

Postmasters are compensated through the Workload Service Credit (WSC) system, in which their pay grade is determined by the number of credits earned. WSCs are earned for the amount of revenue going through the post office, and for performing other non-revenue activities like serving post office boxes and delivery routes, sorting mail, and performing administrative functions.

The current methodology for attributing Postmaster costs to products has been in place since Docket No. R84-1. It assumes proportionality between volume and WSCs, but relies upon a regression analysis presented in Docket No. R84-1 to measure the variability between WSCs and Postmaster costs.

Given the time that has passed since the Docket No. R84-1 model was estimated, it seems appropriate to investigate if there have been any substantial

changes to the Postmaster compensation system that would affect the relationship between WSCs and cost, and would affect the method through which the resulting variability should be estimated. Investigation of the compensation system revealed that there are three important changes that should be taken into consideration.

First, in order to preserve rural post offices, the Postal Service instituted a process, known as the Postal Service's Post Office Structure Plan or POStPlan that not only changed the hours at smaller post offices, but also changed the Postmaster compensation structure. Following the implementation of POStPlan, post offices that were in the EAS grades below EAS-18 are no longer in the EAS system.

Second the Postal Service recently split the EAS-18 grade into two grades, a "new" EAS-18 grade, and an EAS-18B grade. Finally, the Postal Service periodically updates the Postmaster salary scale, revising the amount of salary paid for each grade. The most recent salary schedule was established in January 2019, and this is relevant because the relative sizes of the salary steps can affect the estimated variability.

Proposal

The proposal is summarized below, but a full discussion of the research supporting the proposal is provided in a report by Professor Michael D. Bradley, electronically attached to this Petition as a separate pdf file. Also provided separately, in USPS-RM2020-2/1, are the operational data, the SAS programs and Excel files employed, the econometric results, and impacts. Further materials providing additional detail on competitive products are provided under seal in USPS-RM2020-2/NP1.

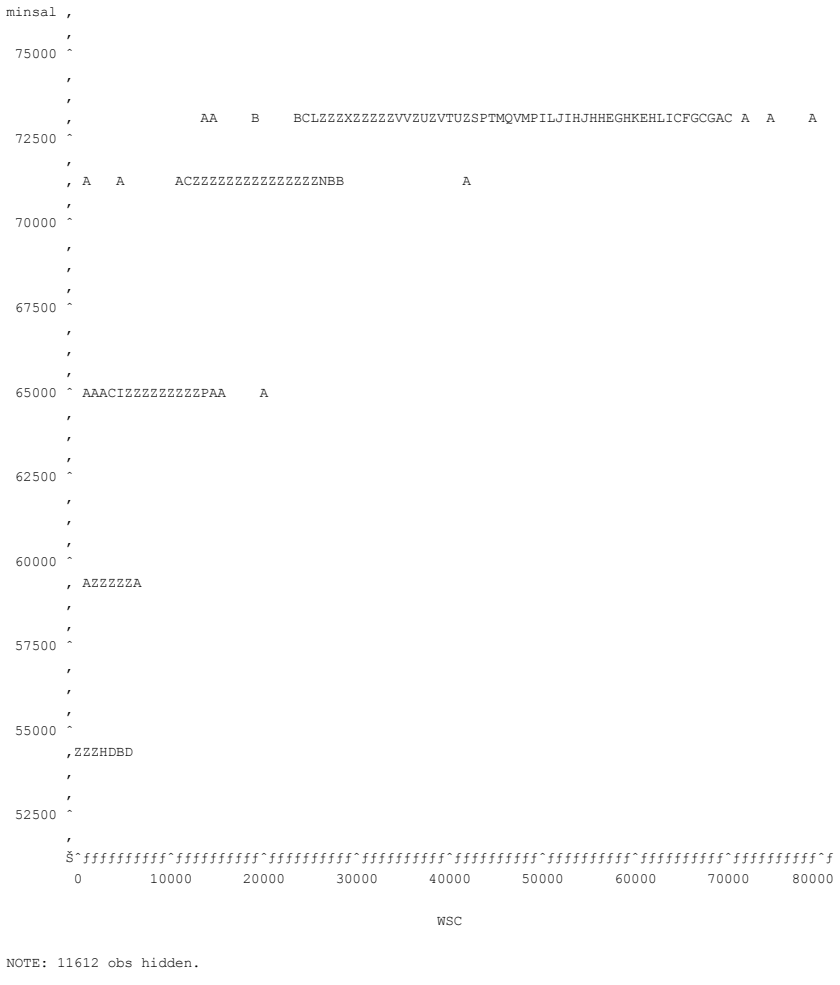
The Docket No. R84-1 variability, currently in use, was based upon a regression using just ten data points. The Docket No. R84-1 model relied upon so few data points because of the lack of available data on the WSCs for individual post offices. However, this has since changed. As in other functions, the Postal Service now routinely collects data on Postmaster workload for operational purposes. The primary users of these data are area, district, and other field personnel who are interested in validating current workloads and the corresponding pay structure at post offices. But the existence of this operational data provides an excellent opportunity for updating and improving the Postmaster variability.

The advantage of using this operational data for a variability analysis is that they contain both the EAS grade and current WSCs for the Postmasters in the EAS system, covering over 13,000 offices. Such data will support a more sophisticated variability analysis than was possible in the past.

In addition, the operational data will support estimation of variability models that reflect the true structure of Postmaster costs. Figure 1 presents a plot of each office's EAS grade minimum salary against its WSCs for all of the offices in EAS grades 18 through 22. It demonstrates the "step function" nature of the EAS structure. Note that there are only five different values for the minimum salary, despite many different values for WSCs. Given this structure, the appropriate econometric approach is to estimate a discrete dependent variable model. Discrete dependent variable models are designed to provide appropriate estimation techniques when the dependent variable takes on a limited number of individual values. Specifically, to match the structure of the EAS compensation system, a series of logistical or "logit" models were estimated. The

models cover the current steps in the EAS system, with each one being able to measure how many Postmasters would move from one EAS grade to the next in response to a change in WSCs.

Figure 1: A Plot of Minimum Salary Against WSCs for EAS Grades 18 through 22



NOTE: 11612 obs hidden.

However, to complete the variability calculation, the change in salaries caused by the movement of Postmasters through the EAS grades must be also computed. The salary change is what will determine the cost impact of the Postmaster movements. Formally combining the shift in the number of Postmasters with the change in salary produces the algorithm necessary for computing the Postmaster variability.

The value for the variability comes from two sources: the percentage change in the number of Postmasters moving up a grade and the percentage increase in the minimum salary across the two EAS grades.[1] Table 1 presents the variabilities associated with a 10 percent increase in WSCs, for each EAS grade, along with the

Table 1: Calculating the Variabilities by EAS Grade
Given a 10 Percent Increase in WSCs

Grades	Change in # of PM	% Change In # of PMs	Change in Min Salary	% Change in Min Salary	Variability of Cost
18 to 18B	379	9.3%	5,219	9.7%	8.9%
18B to 20	308	6.9%	6,000	10.1%	6.9%
20 to 21	194	7.5%	5,700	8.7%	6.5%
21 to 22	104	9.0%	2,300	3.2%	2.9%
22 to 24	44	5.2%	8,700	11.9%	6.1%
24 to 26	14	5.5%	17,900	21.8%	11.9%

[1] Because of the additive nature of Postmaster costs after a volume change (i.e. the remaining cost of the postmasters who stay in the lower grade plus the new costs of the Postmasters that move up a grade) the elasticity of cost is not the product of the percentage change in Postmasters times the percentage change in salary.

associated percentage changes in Postmasters and salaries. The larger either one of these factors, the larger will be the variability. For example, the EAS-21 variability is low because the percentage salary increment is small, as the increase from $71,000 to $73,300 is just a 3.2 percent increase.

Impact

With different variabilities for each of the EAS grades, there is no longer a single variability that is applied to accrued Postmaster costs. To calculate total volume variable costs under the new approach, the FY 2018 accrued cost for each grade is multiplied by the variability estimated for that grade. Those multiplications produce the volume variable costs for each grade, and then the grade-level volume variable costs are summed to get total volume variable cost. Dividing total volume variable cost by total accrued cost produces the overall variability implied by the new study. That new overall variability is lower than the variability from Docket No. R84-1, for three reasons.

First, the Docket No. R84-1 variability was overstated due to a computational error. Correcting that error reduces the Docket No. R84-1 variability to 13 percent. Second, POStPlan eliminated the lower EAS grades. Those lower grades where Postmasters could move relatively rapidly to a higher minimum salary caused by moving up an EAS grade. As a post office gets to the higher EAS grades, much larger increases in WSCs are required to move to a higher grade. Thus, increases in WSCs for Postmasters in the higher grades of the EAS system are less likely to cause them to move up to a higher minimum salary. This means that under the current structure a

given percentage increase in volume is less likely to create an increase in cost -- creating a lower variability.

Third, the Docket No. R84-1 approach measures only the potential increase in cost from increases in volume and thus WSCs. That is, it measures how quickly salaries would rise from an overall increase in WSCs. But each EAS grade has a wide band of WSCs associated with it, and most post offices have a level of WSCs such that typical increases in their WSCs will keep the Postmaster in the same grade.

The Docket No. R84-1 methodology did not account for the amount of WSCs Postmasters are actually earning, nor did it attempt to measure how quickly the existing complement of Postmasters would move up a grade if WSCs increased. The new study does those measurements and captures the impact of WSC increases that keep Postmasters in their same EAS grades, as well as those that cause an increase in EAS grade.

Reducing the variability causes a reduction in total Postmaster volume variable costs. This translates into proportional reductions in Postmaster volume variable costs per piece by product. However, Postmaster costs per piece are typically quite small to begin with, particularly for market-dominant products. See Table 2 below. Consequently, the overall impacts on volume variable costs per piece are generally quite small. The Postmaster volume variable cost per piece for First Class Mail is just $0.0025 in the established methodology. It falls to $0.0010 under the new Postmaster study. This is a substantial proportional decline, but the absolute reduction in First Class marginal cost is just $0.0015. Given that the overall marginal cost for First Class Mail was $0.209 in FY 2018, this Postmaster cost change is not material. The only

market-dominant product to see a per-piece decline as large as one cent is Media/Library Mail, whose volume variable Postmaster cost per piece falls from about two cents to just eight-tenths of a cent. Of course, this decline is still quite small relative Media/Library Mail's overall volume variable cost per piece of $4.55, only about one-quarter of one percent.

Because Postmaster costs are somewhat higher for a few competitive products, the absolute decline in unit costs is a bit more noticeable. Again, however, expressing the declines associated with the new Postmaster methodology in terms of a percentage of overall costs per piece, none of the changes for any product reach one percent. Priority Mail Express overall unit costs fall by 0.8 percent, Retail Ground costs fall by 0.4 percent, and Priority Mail costs fall by half a percent. A table providing details on the impact of the proposal on competitive products will be provided under seal in USPS-RM2020-2/NP1.

Table 2: Impact on Products

Domestic Market Dominant Products	Proposed Methodology	Established Methodology	Difference
Single-Piece Letters	$0.0011	$0.0028	-$0.0017
Single-Piece Cards	$0.0008	$0.0020	-$0.0012
Presort Letters	$0.0009	$0.0022	-$0.0013
Presort Cards	$0.0006	$0.0015	-$0.0009
Single-Piece Flats	$0.0037	$0.0093	-$0.0056
Presort Flats	$0.0022	$0.0056	-$0.0034
Total First-Class Mail	$0.0010	$0.0025	-$0.0015
High Density and Saturation Letters	$0.0004	$0.0009	-$0.0005
High Density and Saturation Flats/Parcels	$0.0004	$0.0010	-$0.0006
Every Door Direct Mail-Retail	$0.0004	$0.0010	-$0.0006
Carrier Route	$0.0006	$0.0015	-$0.0009
Letters	$0.0005	$0.0012	-$0.0007
Flats	$0.0009	$0.0023	-$0.0014
Parcels	$0.0027	$0.0069	-$0.0042
Total USPS Marketing Mail	$0.0005	$0.0012	-$0.0007
In County	$0.0002	$0.0006	-$0.0004
Outside County	$0.0006	$0.0015	-$0.0009
Total Periodicals	$0.0006	$0.0014	-$0.0009
Bound Printed Matter Flats	$0.0017	$0.0042	-$0.0025
Bound Printed Matter Parcels	$0.0024	$0.0061	-$0.0037
Media/Library Mail	$0.0078	$0.0197	-$0.0119
Total Package Services	$0.0000	$0.0000	$0.0000
US Postal Service	$0.0000	$0.0000	$0.0000
Free Mail	$0.0000	$0.0000	$0.0000
Total Domestic Market Dominant Mail	$0.0007	$0.0018	-$0.0011
Total Domestic Competitive Mail and Services	$0.0084	$0.0213	-$0.0129
Total International Mail and Services	$0.0062	$0.0158	-$0.0095